# **DEPARTMENT OF TRANSPORTATION**

DIVISION OF ENGINEERING SERVICES Office of Structural Materials

Quality Assurance and Source Inspection

Bay Area Branch 690 Walnut Ave.St. 150 Vallejo, CA 94592-1133

(707) 649-5453 (707) 649-5493



Contract #: 04-0120F4

Cty: SF/ALA Rte: 80 PM: 13.2/13.9

File #: 69.28

# WELDING INSPECTION REPORT

Resident Engineer: Pursell, Gary **Report No:** WIR-016142 Address: 333 Burma Road **Date Inspected:** 07-Aug-2010

City: Oakland, CA 94607

**OSM Arrival Time:** 700 **Project Name:** SAS Superstructure **OSM Departure Time:** 1900 **Prime Contractor:** American Bridge/Fluor Enterprises, a JV

Contractor: Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China

**CWI Name: CWI Present:** Yes Zhu Zhong Hai No **Inspected CWI report:** Yes N/A **Rod Oven in Use:** Yes No No N/A N/A **Electrode to specification:** Yes No Weld Procedures Followed: Yes No N/A N/A **Qualified Welders:** Yes No **Verified Joint Fit-up:** Yes No N/A N/A Yes No N/A **Approved Drawings:** Yes No **Approved WPS:** Yes No N/A **Delayed / Cancelled:** 

34-0006 **Bridge No: Component:** Orthotropic Box Girder (OBG)

# **Summary of Items Observed:**

On this day CALTRANS OSM Quality Assurance (QA) Inspector Manoj Prabhune was present during the times noted above Company (ZPMC) at Changxing Island in Shanghai, China. QA observed and/or found the following:

for observations relative to the fabrication of the SAS Superstructure being performed by Zhenhua Port Machinery

This QA Inspector randomly observed the following work in progress:

# **OBG # TRIAL ASSEMBLY YARD**

Segment #9BE

This QA performed a joint survey dimensional inspection of Plumbness & Flatness on segment 9AE. The inspection was performed along with Caltrans (CT) QA Mr. Manjunath Math. Measurements of the Deck Panel diaphragm plate plumbness & Flatness were taken from PP74 to PP75. Details of these locations can be found on CT / QA document titled "OBG DCP Hand Measurement Survey: Deck Panel Diaphragm Plate Plumbness & Flatness". This QA recorded the measurements and submitted the information to CT / QA lead inspector for review.

#### Segment #9BW

This QA performed a joint survey dimensional inspection of corner assembly cope holes on segment 9BW. The inspection was performed along with Caltrans (CT) QA Mr. Manjunath Math; Measurements of the cope holes were taken from PP74.25 to PP76. At the following locations: E1~E2, S1~S5 and T1~T3 on both the crossbeam

# WELDING INSPECTION REPORT

(Continued Page 2 of 3)

and bike path sides. Details of these locations can be found on CT / QA document titled "OBG DCP Hand Measurement Survey: Corner Assembly Cope Holes". This QA recorded the measurements and submitted the information to CT / QA lead inspector for review.

# Segment # 9DW ~ 9EW

This QA inspector observed, ZPMC qualified welding personnel identified as 067609 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW9C-008; ZPMC CWI is identified as Mr.Zhu Zhong Hai. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1.

# Segment # 9DW

This QA inspector observed, ZPMC qualified welding personnel identified as 046706 perform Flux Core Arc Welding (FCAW), weld joint identified as SEG055B-007; ZPMC QC is identified as Mr.Shi Lei. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-T-2132.

# Segment # 9CW ~ 9DW

This QA inspector observed, ZPMC qualified welding personnel identified as 067764 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW9C-002; ZPMC CWI is identified as Mr.Zhu Zhong Hai. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-B-U2-FCM-1. See the attached photo.

# Segment #9EW

This QA inspector observed, ZPMC qualified welding personnel identified as 037932 perform Shielded Metal Arc Welding (SMAW), weld joint identified as CA067-002; ZPMC QC is identified as Mr.Shi Lei. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-TC-U4b-FCM-1. See the attached photo.

#### Segment # 9BW

This QA inspector observed, ZPMC qualified welding personnel identified as 205718 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW9K-001; ZPMC CWI is identified as Mr. Zhu Zhong Hai. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-TC-U4b-FCM-1.

#### Segment # 9CW

This QA inspector observed, ZPMC qualified welding personnel identified as 069896 perform Shielded Metal Arc Welding (SMAW), weld joint identified as OBW9K-005; ZPMC CWI is identified as Mr. Zhu Zhong Hai. The welding parameters measured using QC's calibrated instrument appeared to be in general compliance with WPS-B-P-2214-TC-U4b-FCM-1.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.

# WELDING INSPECTION REPORT

(Continued Page 3 of 3)





# **Summary of Conversations:**

Only general conversation was held between QA and QC concerning this project.

# **Comments**

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Eric Tsang phone: 15000422372, who represents the Office of Structural Materials for your project.

<b>Inspected By:</b>	Prabhune, Manoj	Quality Assurance Inspector
Reviewed By:	Patterson,Rodney	QA Reviewer